

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An elastomeric stamp for printing a pattern on a substrate with an ink the stamp being at least partially formed from a first material, the stamp comprising:
a first surface in a first plane for contacting the substrate,
a second surface in a second plane and,
a third surface extending from the first surface to the second surface, the third surface being permeable to the ink, the first surface comprising and
a barrier layer being substantially impermeable to the ink,
wherein the barrier layer is on the first surface and not on the second surface.

2. (Withdrawn) The elastomeric stamp as claimed in claim 1, wherein the barrier layer is non-covalently bound to the first surface.

3. (Withdrawn) The elastomeric stamp as claimed in claim 1, wherein the first barrier layer comprises an inorganic oxide.

4. (Withdrawn) The elastomeric stamp as claimed in claim 1, wherein the first barrier layer comprises a polymer material.

5. (Withdrawn) The elastomeric stamp as claimed in claim 1, wherein the first barrier layer comprises the first material in a modified form.

Claim 6 (Canceled)

7. (Currently Amended) The elastomeric stamp as claimed in claim 6 claim 1, wherein the first surface and the third surface form an angle between 60-90° acute angle larger than 60° and less

than 90°.

8. (Withdrawn) The elastomeric stamp as claimed in claim 6, wherein the further barrier layer is of the same material as the barrier layer.

9. (Withdrawn) A method for printing an ink in a pattern on a substrate of an electronic device using an elastomeric stamp, the elastomeric stamp being at least partially formed from a first material, the elastomeric stamp comprising a first surface in a first plane, a second surface in a second plane and a third surface extending from the first surface to the second surface, the third surface being permeable to the ink, the first surface comprising a barrier layer being substantially impermeable to the ink, the method comprising the acts of:

bringing the elastomeric stamp into contact with a supply of an ink solution;

absorbing the ink solution in the first material;

cleaning at least the barrier layer of the elastomeric stamp;

drying the elastomeric stamp; and
forming at least a part of the pattern by placing the
elastomeric stamp on the substrate with the barrier layer
contacting the substrate and transferring the ink from the first
material to the substrate via the third surface.

10. (Withdrawn) The method as claimed in claim 9, wherein the
act of cleaning at least the barrier layer of the elastomeric stamp
comprises rinsing the elastomeric stamp with a solvent.

11. (Withdrawn) A method of producing a patterned elastomeric
stamp for printing an ink on a substrate of an electronic device,
the method comprising the acts of:

providing a master having a first surface in a first plane, a
second surface in a second plane and a third surface extending from
the first surface to the second surface;

depositing a first material precursor on said surfaces of the
master;

generating an elastomeric stamp having a first surface in a

first plane, a second surface in a second plane and a third surface extending from the first surface to the second surface by transforming the first material precursor to a first material, said surfaces of the elastomeric stamp being permeable to the ink; and forming a barrier layer on the first surface of the elastomeric stamp the barrier layer being impermeable to the ink.

12. (Withdrawn) The method as claimed in claim 11, wherein the act of forming a barrier layer on the first surface of the elastomeric stamp comprises anisotropically depositing a metal on the first surface of the elastomeric stamp.

13. (Withdrawn) The method as claimed in claim 12, further comprising the act of oxidizing the barrier layer.

14. (Withdrawn) The method as claimed in claim 11, wherein the act of forming a barrier layer on the first surface of the elastomeric stamp comprises forming a layer of polymer material on the first surface of the elastomeric stamp.

15. (Withdrawn) The method as claimed in claim 14, wherein the act of forming a layer of a polymer material on the first surface of the elastomeric stamp comprises adhering a polymer material to the first surface of the elastomeric stamp.

16. (Withdrawn) The method as claimed in claim 14, wherein the act of forming a layer of a polymer material on the first surface of the elastomeric stamp comprises depositing a precursor of the polymer material on the first surface of the elastomeric stamp; and forming the layer of the polymer material from the precursor.

17. (Withdrawn) The method as claimed in claim 16, wherein the act of forming the layer of the polymer material from the precursor is preceded by depositing a polymerization initiator on the first surface of the elastomeric stamp.

18. (Withdrawn) The method as claimed in claim 14, further comprising the acts of:

modifying the first surface of the master; and
depositing a precursor of the polymer material on the modified
first surface of the master.

19. (Withdrawn) The method as claimed in claim 11, wherein the
act of forming a layer of a second material on the first surface
comprises modifying a layer of the first material at the first
surface.

20. (Withdrawn) The method as claimed in claim 11, further
comprising the act of forming a further barrier layer on the second
surface of the elastomeric stamp, the further barrier layer being
impermeable to the ink.

Claim 21 (Canceled)

22. (New) The elastomeric stamp of claim 1, wherein a
diffusion coefficient of the ink in a material of the barrier layer
is at least a decade smaller than a diffusion coefficient of the

ink in the first material.

23. (New) The elastomeric stamp of claim 1, wherein the first surface and the third surface form an acute angle smaller than 90°.